Government–wide Financial Data Standards

Fred Lehnhoff
Mike Murray
Ed Coia
Marcel Jemio

Overview

▸ Enterprise Data Architecture Standards
- Standardization Efforts Within FMS Business Lines and Across the Enterprise
- Federal Data Registry / Data Reference Model
- Data Governance
- System Interface Standards – XML Schemas
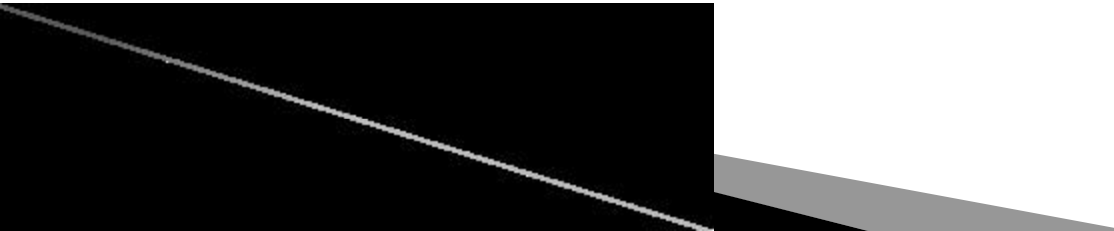- Data Warehouses – Data Harmonization
- Master Data Reference Source

- ▸ Activities
  - Develop current and future state architectural system plans for each business line.
  - Develop enterprise system architectural plan encompassing each future state business system plan.
  - Develop a master time line for the enterprise architect plan.
- ▸ Stakeholders
  - FMS Business Lines, EDA, Federal Agencies
- ▸ Accomplishments
  - Current and future state architectural plans completed.
  - Enterprise architectural vision in draft form.
  - Master time line developed and under review.

- ▸ Activities
  - The EDM is conceptual, shows only entity types and principal relationships.
  - For master data entities, a logical data model is being developed that will show attributes and details of relationships.
  - Master data entities will include all of our standard financial data elements that are used throughout FMS, OMB, CGAC and FMLoB.
  - As an interim solution, we are building a repository to assemble and collect data elements and associated metadata.
- ▸ Stakeholders
  - Business Lines, EDA, IR, Treasury, OMB, FMLoB, CGAC, FSIO, FSIO Payments Standardization.
- ▸ Accomplishments
  - Data elements from USSGL, CGAC, (TRS and PAM – partial) will be incorporated into our registry for the first release in September 2007.
  - Additional data elements will be added every 60 days.

- ▸ Activities
  - Draft data management policy is under development.
  - Working with FMS, FMLoB, CGAC, FSIO, OMB, Treasury, Government Agencies.
- ▸ Stakeholders
  - Business Lines, EDA, IR, FMLoB, CGAC, FSIO, OMB, Treasury, Government Agencies.
- ▸ Accomplishments
  - Currently drafting a proposal to assemble an oversight committee and a working Community of Practice to deal with issues concerning data harmonization.
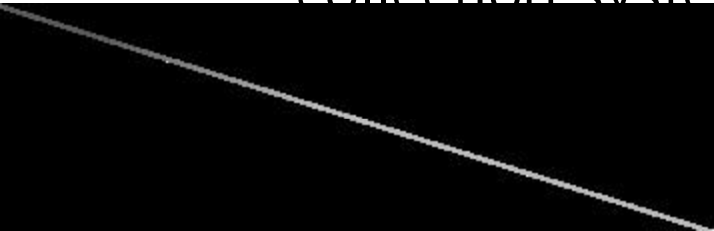
▸ Activities
  - Developing flat, extensible system interface to facilitate a uniform and predictable exchange of data.
  - Implementation Guide.
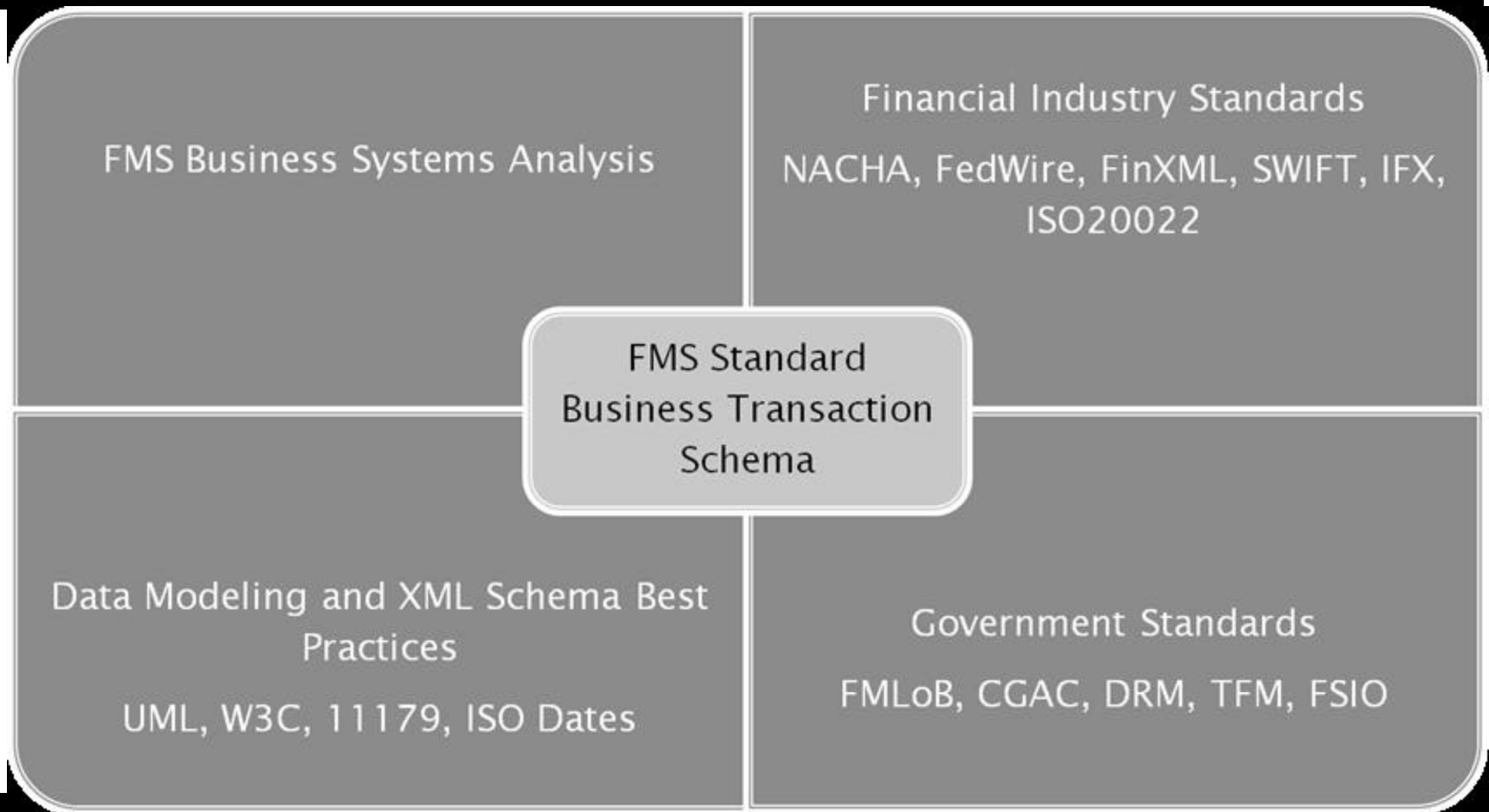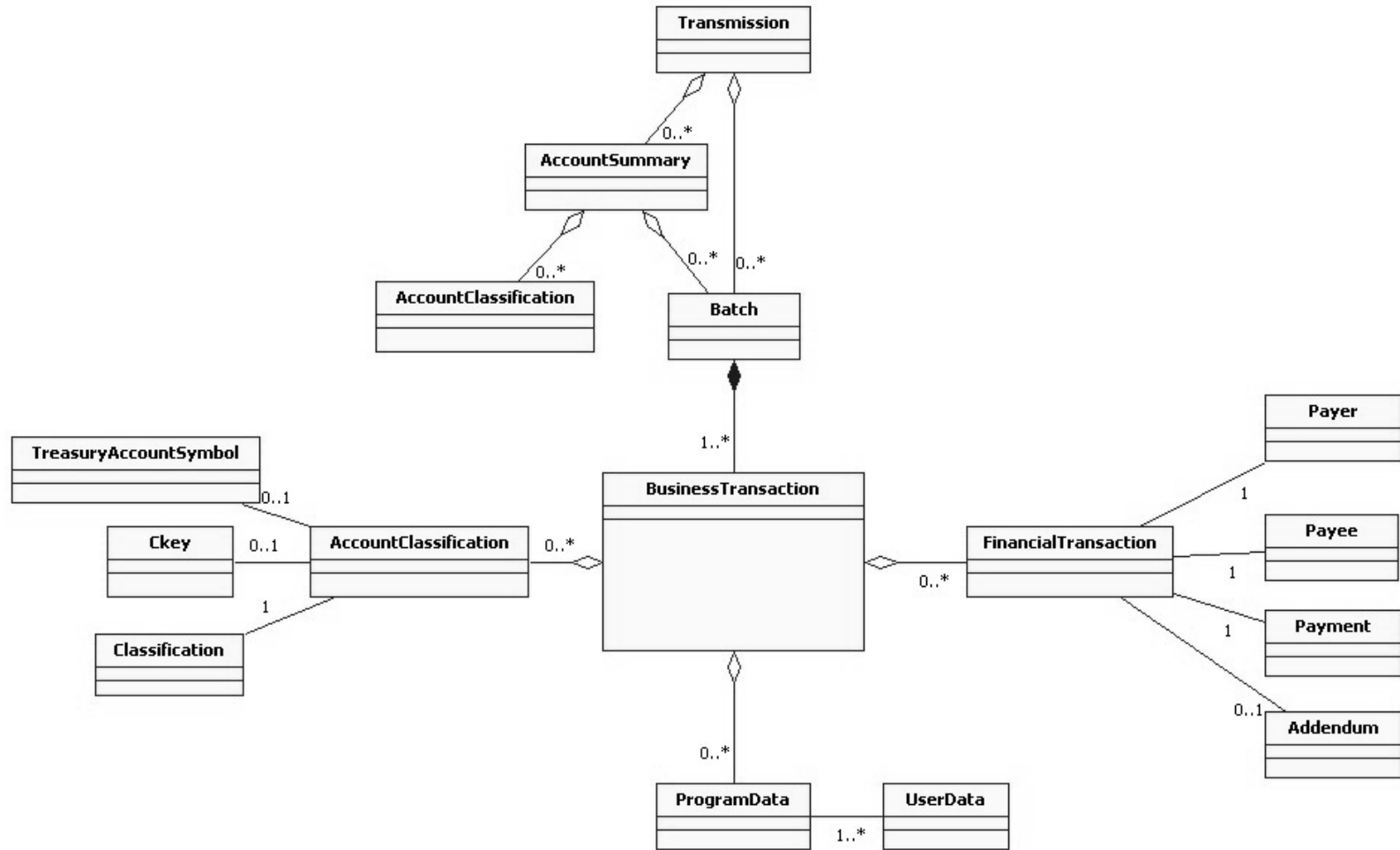 - Standardizing XML Tags.

▸ Stakeholders
  - Business Lines, EDA, IR, FMLoB, CGAC, FSIO, OMB, Treasury, Government Agencies.

▸ Accomplishments
  - Standard XML schema has been developed and will be in use in September.
  - Current schema can accommodate 24 distinct collection systems.

XML Schema Development Methodology

FMS Business Systems Analysis	Financial Industry Standards NACHA, FedWire, FinXML, SWIFT, IFX, ISO20022
Data Modeling and XML Schema Best Practices UML, W3C, 11179, ISO Dates	Government Standards FMLoB, CGAC, DRM, TFM, FSIO

FMS Standard Business Transaction Schema

Data Warehouses – Data Harmonization

- Collections
  - Transaction Reporting System (TRS)
  - Data Normalization Across 24 Disparate Systems.
  - Standardized Reporting and Information Feeds to Government Agencies.
  - Single Touch Point.
- Similar Data Warehouses
  - Payments (PAM)
  - Intergovernmental Transfers (IPAC).
  - Government-wide Accounting (GWA).

Master Data Reference Source

▸ **Shared Accounting Module (SAM)**
- Agency Location Code (ALC) Master File
- Treasury Account Symbol (TAS) Master File
- Business Event Type Code (BETC) Master File
- TAS/BETC Master File (Valid Combinations)

▸ **Data Registry**
- Implementation Guides
- Schemas

Highlights

- Segmented Architecture
  - Current system state and future state architecture completed.
  - Currently constructing an enterprise-wide future state architecture.
  - Currently reviewing an enterprise system implementation timeline.

- Data Registry – Data Standardization
  - Data normalization work incorporating TRS, PAM and USSGL currently underway – First registry implementation in September.
  - Future systems include:
    - Additional Payment Systems
    - Cash Concentration and Settlement
    - Additional GWA Applications
  - Working with FMLoB, CGAC, OMB and the FSIO Payments Standardization groups to endorse a single registry of Standard Government-wide Financial Data Elements.

- Data Governance
  - EDA is aggressively engaged with FMLoB, CGAC, FSIO, Payments Standardization committees, GWA and IR EA.
  - Developing a draft Data Governance Policy.

Highlights

▸ XML Schema / Data Standards

- Standard XML Schema (Release 1) is finalized and will be in use in September.
- Current XML schema can accommodate data interfaces from 24 distinct collection systems.
- Initial work with Payments (PAM) seems to indicate that the same schema can be used for payment related transactions.